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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,801	11/29/2001	Yoshihisa Fujiwara	011612	9176
23850	7590	11/15/2004	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP			THANH, QUANG D	
1725 K STREET, NW			ART UNIT	
SUITE 1000			PAPER NUMBER	
WASHINGTON, DC 20006			3764	

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,801

Applicant(s)

FUJIWARA ET AL.

Examiner

Quang D. Thanh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7-11 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) 19-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7-11 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed on 10/19/2004 in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/7/2004 has been entered.

2. This office action is responsive to the amendment filed on 9/7/2004. As directed by the amendment: claims 1,7,9-10, and 16 have been amended; claims 2-6 and 12-15 have been cancelled; and claims 19-26 have been withdrawn. Thus, claims 1,7-11 and 16-18 are presently pending in this application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mrklas et al. (5,304,112) in view of Ulrich (6,024,575) and further in view of Nelson (4,437,471).

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5. Re claim 1, Mrklas discloses a massage machine 55 (fig. 1) comprising a living body information sensor (biological sensors, col. 14, lines 13-19) for detecting the living body information of a user's autonomic nervous system, a control circuit 23 for controlling a massage operation 9 based on the living body information detected by the sensor, the control circuit comprising psychological state estimating means 15 for estimating the psychological state based on the living body information detected by the sensor, and massage movement adjusting means SRS Computer 23 and control module 27 (fig. 1B). Mrklas also discloses that the SRS Computer 23 is programmed to increasingly induce deeper states of relaxation as the session progresses (col. 21, lines 12-14) and near the end of the session may again initiate the massage mechanism to awaken the subject from his relaxed state and into normal wakefulness, and the SRS Computer 23 may of course be programmed to follow other massage sequences during a session depending on the objectives of the session (col. 6, lines 58-68). This inherently teaches that the SRS Computer 23 is programmable by a program as a mode changeover means for switching between a relaxation mode (relaxed state) and a refreshment mode (normal wakefulness). However, Mrklas does not explicitly disclose the massage movement is adjusted so as to reduce the activity of the autonomic nervous system in the relaxation mode and to increase the activity of the autonomic nervous system in the refreshment mode. Nevertheless, Ulrich teaches a vibrating biofeedback device that can either help the user to relax and reduce the stress through vibrations or to awaken the user in situations where continued alertness is necessary (col. 4, lines 2-8). This device has a microprocessor that can be programmed to cause

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vibrations in inverse relationship to the degree of stress experienced, thereby would adjust the vibration to decrease the activity of the autonomic nervous system in order to relax the user and increase the activity of the autonomic nervous system in order to prevent a user from dozing off (col. 4, lines 13-20). Since Mrklas already teaches that high activity level of the autonomic nervous system is associated with high level of stress (col. 14, lines 18-21), therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to operate Mrklas' device, such that it would adjust the vibration in inverse relationship to the degree of stress experienced, as suggested by Ulrich, for the purpose of decreasing the activity of the autonomic nervous system in order to help the user to relax and reduce the stress through vibrations or increasing the activity of the autonomic nervous system in order to awaken the user in situations where continued alertness is necessary (col. 4, lines 2-8).

Mrklas although discloses one or more sensors selected from among galvanic skin resistance, pulse rate (heart rate, col. 14, lines 13-23), it does not explicitly disclose a skin temperature sensor and the psychological state estimating means of the control circuit interprets a rise in the skin temperature as indicating a relaxed state, and a drop in the skin temperature as indicating a tense state. However, Nelson teaches that it is well known in the art to use various sensors such as heart rate, respiration and especially skin temperature to determine whether an individual is relaxed or under stress and that the higher the individual's temperature, the more relaxed that person is and conversely a low skin temperature would indicate that person is tense and under stress (col. 1, lines 10-45). Therefore, it would have been obvious to one of ordinary

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skill in the art at the time of invention was made to include skin temperature sensor in the Mrklas's device, as suggested and taught by Nelson, for the purpose of measuring an individual's skin temperature thereby giving an indication of the individual's degree of relaxation or tenseness (col. 1, lines 5-9).

6. Re claim 7, Mrklas also discloses one or more sensors selected from among galvanic skin resistance, pulse rate (heart rate) with higher heart rates being associated with higher levels of stress or tense state and lower heart rates being associated with lower levels of stress or relaxed state (col. 14, lines 13-19).

7. Claims 1 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inbe et al. (5,993,401) in view of Ulrich (6,024,575) and further in view of Nelson (4,437,471).

8. Re claims 1 and 7, Inbe discloses a massage machine (fig. 1) comprising a living body information sensor (heart beat sensor 11) for detecting the living body information of a user's autonomic nervous system, a control circuit 30 for controlling a massage operation based on the living body information detected by the sensor, the control circuit comprising psychological state estimating means 10/45 for estimating the psychological state based on the living body information detected by the sensor, and massage movement adjusting means 20 (fig. 2 and 8) comprising mode changes over means 40 (col. 6, lines 7-24) for switching between a relaxation mode (deep relax level H as shown in fig. 9) and a refreshment mode (light level L, fig. 9).

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Inbe although discloses the massage movement is adjusted to lower the activity of the autonomic nervous system in the relaxation mode (col. 7, line 22 to col. 8, line 29), it does not explicitly disclose the massage movement is adjusted so as to increase the activity of the autonomic nervous system in the refreshment mode. However, Ulrich teaches a vibrating biofeedback device that can either help the user to relax and reduce the stress through vibrations or to awaken the user in situations where continued alertness is necessary (col. 4, lines 2-8). This device has a microprocessor that can be programmed to cause vibrations in inverse relationship to the degree of stress experienced, and since the degree of stress is known to be directly associated with the activity of the autonomic nervous system, therefore the microprocessor would adjust the vibration to decrease the activity of the autonomic nervous system in order to relax the user and increase the activity of the autonomic nervous system in order to prevent a user from dozing off (col. 4, lines 13-20). Since Inbe already teaches that the change rate of the heartbeat (activity of the autonomic nervous system) is associated with the relax level (level of stress) (col. 7, lines 22-35), therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to operate Inbe's device, such that it would adjust the vibration in inverse relationship to the degree of stress experienced, as suggested by Ulrich, for the purpose of decreasing the activity of the autonomic nervous system in order to help the user to relax and reduce the stress through vibrations or increasing the activity of the autonomic nervous system in order to awaken the user in situations where continued alertness is necessary (col. 4, lines 2-8).

Inbe although discloses the living body information sensor includes a pulse rate sensor (heart rate sensor), it does not disclose a skin temperature sensor and the psychological state estimating means of the control circuit interprets a rise in the skin temperature as indicating a relaxed state, and a drop in the skin temperature as indicating a tense state. However, Nelson teaches that it is well known in the art to use various sensors such as heart rate, respiration and especially skin temperature to determine whether an individual is relaxed or under stress and that the higher the individual's temperature, the more relaxed that person is and conversely a low skin temperature would indicate that person is tense and under stress (col. 1, lines 10-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to include skin temperature sensor in the Inbe's device, as suggested and taught by Nelson, for the purpose of measuring an individual's skin temperature thereby giving an indication of the individual's degree of relaxation or tenseness (col. 1, lines 5-9).

9. Re claim 8, Inbe discloses the control circuit gives different kinds of massages to a plurality part of the person (col. 8, lines 25-30) and adjust the massage movement (by varying different massage speeds/intensity and time durations) for each kind of the massage to be given to each part in accordance to the result of estimation of the psychological state (col. 4, lines 28-60).

10. Re claim 9, Inbe further discloses that the massage operation is executed by a sequence of massage movements (S1-S5, fig. 3, col. 4, lines 5-64), and the massage movement adjusting means comprises time adjusting means (to set time period

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necessary for inducing the user to the relax state, col. 4, lines 5-64) for adjusting the time required for a predetermined number of massages movements so as to complete the sequence of massages movements within the approximately the same period of time.

11. Claims 10-11, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inbe et al. in view of Nelson (4,437,471).

12. Re claim 10, Inbe discloses a massage machine 1 (fig. 1) comprising a living body information sensor (heart beat sensor 11) for detecting the living body information of a user's autonomic nervous system, a control circuit 30 for controlling a massage operation based on the living body information detected by the sensor, the control circuit comprising psychological state estimating means 10/45 for estimating the psychological state based on the living body information detected by the sensor by executing a preliminary massage (col. 3, lines 65 to col. 4, line 5) and massage operation adjusting means 20 (fig. 2 and 8). Inbe although discloses the living body information sensor includes a pulse rate sensor (heart rate sensor), it does not disclose a skin temperature sensor and the psychological state estimating means of the control circuit interprets a rise in the skin temperature as indicating a relaxed state, and a drop in the skin temperature as indicating a tense state. However, Nelson teaches that it is well known in the art to use various sensors such as heart rate, respiration and especially skin temperature to determine whether an individual is relaxed or under stress and that the higher the individual's temperature, the more relaxed that person is and conversely a low skin temperature would indicate that person is tense and under stress (col. 1, lines

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10-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to include skin temperature sensor in the Inbe's device, as suggested and taught by Nelson, for the purpose of measuring an individual's skin temperature thereby giving an indication of the individual's degree of relaxation or tenseness (col. 1, lines 5-9).

13. Re claims 11 and 16-18, Inbe discloses (claim 11) a memory means 42/43/45 for storing the result of estimation of the psychological state, and the massage operation is adjusted based on the result of estimation of the psychological state (col. 6, lines 25-59); (claim 16) the psychological state estimating means 10/45 of the control circuit judges the level of activity of the person in accordance with variations in at least one item of living body information of pulse rate (heart rate) and interprets low activity as indicating a relaxed state and high activity as indicating a tense state; (claim 17) the massage operation adjusting means 20 comprising mode changes over means 40 (col. 6, lines 7-24) for switching between a relaxation mode (deep relax level H as shown in fig. 9) and a refreshment mode (light level L, fig. 9) and adjust different massages in the different modes (by adjusting the massage speed); (claim 18) the control circuit gives different kinds of massages to a plurality part of the person (col. 8, lines 25-30) and adjust the massage movement (by varying different massage speeds/intensity and time durations) for each kind of the massage to be given to each part in accordance to the result of estimation of the psychological state (col. 4, lines 28-60).

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Response to Arguments

14. Applicant's arguments with respect to claims 1, 7-11, and 16-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang D. Thanh whose telephone number is (703) 605-4354. The examiner can normally be reached on Monday-Thursday & alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (703) 308-2675. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both regular and After-Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quang D. Thanh
Patent Examiner
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November 10, 2004

